

1 of to the end-user. The overall level of indirect expenses can reasonably be
2 expected to decrease as a result of a lower level of overall operations resulting
3 from a reduction in retail activity. It is for this reason that the FCC adopted the
4 straightforward approach of applying the ratio of avoided direct expense to total
5 direct expense to each of the indirect expense categories avoided?’

6 Despite the fact that sections of the FCC’s First Report and Order have been
7 remanded, I believe ~~this~~ calculation of avoided Indirect Costs remains reasonable
8 and applicable in the development of avoided costs for resale discount cost
9 studies.

10 **Q. Are the wholesale discounts proposed by Verizon DC reasonable?**

11 **A. No.** Verizon DC has attempted to interpret the Eighth Circuit’s opinion, however,
12 no rules currently exist. The former FCC rules were vacated by the Eighth Circuit
13 Court who remanded the rules back to the FCC.²² The FCC has not yet
14 established new rules. The Court has remanded the rules stating that the FCC has
15 to establish new rules that consider costs that **are** “actually avoided.” Verizon
16 DC’s interpretation is that it will not avoid any significant amount of costs hence
17 the low discount of ~~[proprietary information]~~The FCC’s original rules considered
18 the resale of services **as** if Verizon DC provided only wholesale services. This
19 was a reasonable attempt to determine costs that would be avoided because it
20 considered avoided costs in the long run. Verizon **DC’s** new method is basically a

²⁰ Verizon DC Exhibit D at 231, lines 24-25 – 232, lines 1-3.

²¹ FCC First Report and Order at ¶ 912, 929.

1 short run approach to costing which does not consider all the costs that will
2 actually be avoided in the long run.

3 **Q. Can Verizon DC's method be used?**

4 **A.** No. In addition to all of the points I made above, their method does not comply
5 with any known **FCC** rule, and does not determine avoided costs. At best, it is a
6 method that gives the minimum avoided cost of providing wholesale service
7 without considering other costs that will be avoided. The Verizon **DC** method
8 determines the costs that are easily avoidable, but not all the costs that can be
9 avoided if regulators force them **to** be avoided.

10 **Q. Will there be any new competitors using Verizon DC facilities, if Verizon**
11 **DC's proposed discounts are adopted?**

12 **A.** No. There will probably be no new entry using Verizon DC facilities via
13 wholesale rates, as **CLECs** cannot make any money at the proposed discounts of
14 **[proprietary information]**

15 **Q. When the FCC established the wholesale discount rules, what was the lowest**
16 **approved discount?**

1 A. Although the Eighth Circuit has remanded the rules, the FCC rules set the range of
2 the discount between 17% and **25%**.²³ The existing temporary discount for DC is
3 24.7%.

4 **Q.** What is the appropriate wholesale discount rate for resale for Verizon DC's
5 retail services (Commission Issue **6**)?

6 **A.** The Company's July 16, 2001, cost study has several faults, and it has
7 underestimated avoided costs. Therefore, I recommend that the Commission
8 disregard Verizon DC's proposed wholesale discount of [proprietary information]
9 when using Verizon DC's operators and [proprietary information] when not using
10 Verizon DC's operators. The wholesale discount rate should remain at the interim
11 discount of 24.7% until new rules are developed by the FCC.

12 **Q.** Should Verizon DC **be** required to make its technical and market trials
13 available for **resale** and, if **so**, should **the** wholesale discount rate apply
14 (Commission Issue **9**)?

15 **A.** **In** Section 251(c)(4) of the Telecommunications Act of 1996, **as** amended,
16 Congress stated that **ILECs** must offer for resale at wholesale rates "any
17 telecommunications service" that the carrier provides at retail to noncarrier
18 subscribers." The FCC determined in its First Report and Order that "**this**
19 language **makes** no exception for promotional or discounted offerings, including

²³ FCC First Repon and Order at 1932.

contract and other customer-specific offerings.”²⁵ However, the FCC further clarified in its First Report and Order that short-term (where short-term was defined as 90 days or less) promotional prices do not constitute retail rates for the underlying services and are, thus, not subject to the wholesale rate obligation.²⁶

For this reason I believe that technical and market trials that are being tested in the retail market for less than 90 days should not be subject to resale obligations, and those trials that extend beyond 90 days shall be subject to the wholesale rate obligation and offered to CLECs in the resale market.

Q. Should Verizon DC be required to offer its individual customer contracts for resale at the wholesale discount (Commission Issue 7)?

A. No, these contracts were subject to negotiation with the customer and should not be subject to resale. The price in the contracts was the subject of the give and take of the negotiation process. Adding a third party, the CLEC, after the negotiations is not fair to Verizon DC.

III. Unbundled Network Elements

Q. What cost model and cost studies should serve as the basis for setting permanent rates, and why (Commission Issue 12)?

²⁴ 47 USC § 251(c)(4) (1996), as amended.

²⁵ FCC First Report and Order at ¶ 948.

²⁶ *Id.* at ¶¶ 949, 950.

1 **A.** In developing permanent rates for unbundled network elements, cost models
2 should consist of economically correct cost studies that reflect current network
3 facilities, in a forward-looking environment. The FCC's First Report and Order
4 supports the use of forward-looking economic cost methodology that is based on
5 the total element long-run incremental cost ('**TELRIC**') of the **element**.²⁷ These
6 costs are to be based on **an** ILEC's existing wire center locations using the most
7 efficient technology available in the industry. Forward-looking cost and existing
8 network design most closely represent the incremental costs that incumbents
9 actually expect to incur in making network elements available to new entrants²⁸

10 The Eighth Circuit Court's July 18, 2000 decision in *Iowa Utilities Board v. FCC*
11 vacated FCC rule **§51.505(b)(1)** which eliminated the requirement for costs to be
12 based on state-of-the-art facilities that ILECs did not necessarily **employ**.²⁹ This
13 resulted in the ILEC consequently calculating network element costs below that
14 which the ILEC could support. However, the **TELRIC** methodology has not been
15 vacated. Therefore, the cost model **used** to develop unbundled network element
16 prices should incorporate inputs and technology that is anticipated in the future,
17 based on Verizon **DC**'s current network wire centers.

¹⁷ **FCC Report** and Order at 1682.

²⁸ **Id.** at ¶ 685.

²⁹ 47 CFR **§51.505(b)(1)**.

1 **Q. What is TELRIC?**

2 **A.** TELRIC is an acronym for Total Element Long-Run Incremental Cost. It
3 identifies forward-looking direct costs that are caused by the use of a network
4 element in the long ~~run~~, plus the incremental cost of shared facilities or operations.
5 The assumptions, methods and procedures used in TELRIC cost studies are
6 designed to yield the forward-looking cost of reproducing the telecommunication
7 network, considering the most efficient and least cost technologies.

8 **Q. Do you endorse the TELRIC cost methodology for pricing unbundled**
9 **network elements?**

10 **A.** Yes. Generally the TELRIC methodology is a reasonable method for calculating
11 the cost of utilizing portions of Verizon DC's network in the District of
12 Columbia. TELRIC studies are designed to compute the average incremental cost
13 of providing a network element, based on the forward-looking costs of ~~replacing~~
14 the entire telecommunications network. Therefore, generally TELRIC costs are
15 the most appropriate method for estimating future costs.

16 **Q. Could you summarize the methodology used by Verizon DC to determine the**
17 **cost of unbundled network elements?**

1 **A.** Verizon DC's study is designed to comply with the TELRIC approach outlined by
2 the FCC in its Interconnection Order,³⁰ Verizon DC attests that its cost study
3 methods are based on economically correct forward-looking long-run incremental
4 cost principals, with inputs that were developed using forward-looking
5 assumptions and values that the Company expects to realize over the relevant
6 study period."

7 **Q. Do you agree with the TELRIC results presented by Verizon DC?**

8 **A.** For the most part I do. I have analyzed the recurring cost model and found that it
9 is reasonable. I **also** found that most of the inputs used in Verizon DC's models
10 are reasonable. However, I have made a few suggestions that I believe more
11 accurately portray a forward-looking environment and should be used in the
12 development of recurring charges for the unbundled network elements ("UNEs").

13 **IV. LCAM – Loop Study**

14 **Q. Explain LCAM AND loop inputs.**

15 **A.** Verizon DC's Loop Cost Analysis Model ("LCAM") develops the investments
16 and costs associated with the local loop, based on the current network using
17 TELRIC methodology. The model **uses** inputs from Plant Characteristics,
18 Electronics and VCost models. **The** Plant Characteristics module computes the
19 feeder, sub-feeder and distribution length, **structures** and sizes of the loop, and **are**

³⁰ FCC Docket No. 96-325, First Repon and Order at ¶ 682.
32

1 applied to each wire center. The Electronics module analyzes the working lines in
2 order to identify size and investment for Digital Loop Carrier, in which a weighted
3 investment is determined for each wire center. The VCost module develops
4 annual cost factors that are applied to all investments that are developed in the
5 Loop Study. Additionally, investments for Pole, Conduit and Land & Building are
6 loaded into the model, as well as utilization rates (for distribution, feeder, fiber
7 strand, electronics and conduit).

8 LCAM produces the cost for different loop configurations on a monthly basis, and
9 then Common Overhead and Gross Revenue Loading Factors are added to
10 determine the **UNE** prices proposed by Verizon DC.

11 **Q. What inputs should be used (Commission Issue 13)?**

12 A. The inputs that Verizon DC used in LCAM represent a reasonable construct of the
13 costs incorporated in the configuration of the loop.

14 Most importantly, the inputs that are utilized must be accurate, forward-looking
15 and economically efficient. The inputs in a loop study are pertinent to the cost
16 results because they represent the underlying costs and utilization rates of each of
17 the network components that construct the loop. Therefore, in order to accurately
18 determine costs, and ultimately rates, for unbundled loops each and every input

1 must be correct or the underlying cost will be incorrect. Of primary importance
2 are utilization rates, otherwise known as “fill factors.”

3 **Q. What are fill factors?**

4 **A.** Fill factors are a representation of demand and the percentage at which a facility is
5 being utilized. For example, if a facility has 100 pair cable and 70 of the lines are
6 being used, the fill factor is **70%**.

7 **Q. Why are fill factors important to a cost study?**

8 **A.** Fill factors represent the utilization of a facility. The cost of each line is based on
9 both the total investment cost of the facility and the utilization rate, or fill.
10 Therefore, if the facility costs \$100 and the fill factor is **70%**, the cost per line is
11 equal to: **\$100/70** lines, or **\$1.43** per line. However, if the facility were at a 80%
12 utilization rate, the cost per line would be \$100/80 lines, or **\$1.25** per line.

13 Because of this utilization/cost relationship, fill factors can cause an overstatement
14 or understatement of costs.

15 **Q. ~~Has~~ Verizon DC used appropriate fill factors in its loop module?**

16 **A.** **No**, I believe Verizon DC ~~has~~ underestimated the future utilization of its facilities.

17 **Q. What is the basis for Verizon DC's fill factors?**

1 A. Verizon DC has used “actual” fill factors deployed in the network today. **The**
2 company used the “actual” jurisdictional average utilization for the Feeder fill,
3 “actual” utilization for copper distribution, “actual” fiber strand utilization and
4 “actual” fill for conduit. (LCAM Loop Study, Doc Set – “Loop Study Common
5 **Inputs**”).³² The value used for utilization of common equipment is the
6 jurisdictional average of the feeder fill. Therefore, this input has **also** been loaded
7 using current data rather than forward-looking estimates.³³

8 **Q. What is the effect of using Verizon DC fill factors?**

9 A. The effect of using Verizon **DC**’s fill factors is to increase the loop cost in the
10 District of Columbia as discussed below.

11 **Q. Why do you disagree with the way Verizon DC has allocated fill factors?**

12 A. The fill factors that have been set at “actual” utilization rates in the network today
13 may not represent the utilization of the network in a forward-looking
14 environment. **Verizon DC** claims that “there is no factual or theoretical basis to
15 believe that **these** utilization rates would be different in a forward-looking
16 network.”” **Verizon DC** also responded to **OPC** Data Request **No. 1-20** that “the

³² Formal Case %2. Verizon **DC** LCAM Loop Study. “Doc Set - ‘LoopStudy Common Inputs” (filed July 16, 2001).

³³ Verizon Response to **OPC** Data Request No. 1, Question 1-36. (**OPC** Exhibit A-5).

³⁴ Verizon **DC** Exhibit D at 74.

1 current actual utilization was used as the best available estimate of the forward
2 looking **utilization**.”³⁵

3 Despite Verizon DC’s assertion that actual utilization represents the “best
4 available estimate” of forward-looking utilization, it has not presented evidence
5 that the utilization rates are forward-looking, nor are rates representative of an
6 efficient network. These utilization rates are the product of Verizon **DC’s** current
7 operating environment – an environment that even today has little competition.
8 Verizon DC has not presented any justification that would indicate that the future
9 competitive environment will be the same as the past monopoly environment.

10 Although even the most efficient network cannot operate at **100%** utilization, and
11 feeder facilities **are** inherently more efficient than distribution facilities, it is likely
12 that in a forward-looking network, Verizon DC would achieve much greater
13 utilization rates in all aspects of their network than their actual, current utilization
14 rates that “have been stable in Verizon DC’s network for **years**.”³⁶

15 In order for Verizon DC to accurately portray the utilization of its network in
16 future years, it must be consistent with using **TELRIC** methodology and use the
17 current fill factors to project forward-looking fill factors.

18 **Q. What ~~fill~~ factors do you recommend and ~~why~~ should your recommendations**
19 **be considered (Commission Issue 13.2)?**

³⁵ Verizon Response to OPC Data Request No. 1, Question 1-20. (OPC Exhibit A-6) (Sept. 20, 2001)

1 A. The FCC developed forward-looking fill factors in its Universal Service Cost
2 **Model.**³⁷ The use of the FCC's proxy fill factors would be an acceptable
3 alternative to using projected Teleco fill rates." The FCC rates could be used in
4 the Verizon DC model in an attempt to reflect future utilization. Alternatively,
5 Verizon DC's own estimate could be used. In the LCAM Loop Study "Doc Set"
6 for "Loop Study Common Inputs, Section 5 Utilization Factors" Verizon DC
7 exhibits an expected growth for Copper Feeder Fill over a 1½ year period. The
8 average growth over the 14 wire centers in the District of Columbia is
9 [proprietary information]. A TELRIC model "should be developed to reflect the
10 way efficient networks actually evolve to accommodate growth over time."³⁹
11
12 As an alternative to the FCC utilization rates, I recommend using Verizon DC's
13 growth estimate for Copper Feeder Fill and expanding it over 3 years (rather than
14 1% years), and applying this growth rate to the fill factors for Copper
15 Distribution, Copper Feeder, Fiber Strand, Conduit and utilization of common
equipment, all of which are loaded with "actual" fill rates.

16 **Q. Have you run the LCAM model implementing the changes you suggest?**

³⁶ Verizon DC Exhibit D at 74, lines 13-14.

³⁷ See, In re Federal-State Joint Board on Universal Service, FCC Docket No. 99-304, CC Docket No. 96-45; In re Forward-looking Mechanism for High Cost Support for Non-Rural LECs, CC Docket No. 97-160, Tenth Repon and Order. (rel. Nov. 2, 1999).

³⁸ FCC Average Feeder Fill is 80.3% and average Distribution Fill is 65.6%. *Id.* at Appendix A. "Fill Fact".
³⁹ Verizon DC Exhibit B at 14, lines 19-21.

1 A. Yes. I had the LCAM model run using the forward looking fill factors mentioned
2 above. Using a 3-year time horizon, the following changes were made to Verizon
3 DC's utilization inputs in LCAM:

4 **PROPRIETARY**

5	Fiber Strand	[proprietary information]%
6	Conduit	[proprietary information]%
7	Feeder	[proprietary information]%
8	Copper Distribution	[proprietary information]%
9	Utilization Common Equipment	[proprietary information]%

10 **Q. What was the resulting average 2-wire loop price/cost using your suggested**
11 **changes to the LCAM model?**

12 A. Using Verizon DC's default values, and substituting my suggested changes for a
13 3-year growth horizon produces an average unbundled 2-wire loop cost of
14 [proprietary information] (after adding the values for ~~Gross~~ Revenue and
15 Overhead) as opposed to Verizon DC's proposed rate of [proprietary information].

16 **Q. Have you run the LCAM model using the utilization rates you suggested**
17 **above that have been projected forward-looking 4½ years?**

18 A. Yes. I also had the LCAM model run using a 4½ year time horizon. The
19 following changes were made to Verizon DC's utilization inputs in LCAM:

PROPRIETARY

Fiber Strand	[proprietary information]%
Conduit	[proprietary information]%
Feeder	[proprietary information]%
Copper Distribution	[proprietary information]%
Utilization Common Equipment	[proprietary information]%

Q. What **was** the resulting average **2-wire** loop **price/cost** **using** your suggested **changes to** the LCAM model?

A. Using Verizon **DC's** default values in **LCAM**, and substituting utilization factors that have been projected **4 ½** years produces an average unbundled 2-wire loop cost of [proprietary information] (after adding the values for Gross Revenue and Overhead) as opposed to Verizon **DC's** proposed rate [proprietary information].

Q. Have **you run LCAM using** the **FCC's** default **fill** factors that were **specified** in the Tenth Report and Order?

A. Yes. Using the **FCC's** average feeder fill factor of **80.3%** and average distribution fill factor of **65.6%** for each wire center, and adding the common overhead and **gross** revenue loading factors to the cost calculated by **LCAM**, the resulting 2-wire unbundled loop price would be [proprietary information] rather than [proprietary information] as Verizon **DC** has proposed.

1 **Q. As outlined by the Commission in Issue 14.1, what rate do you believe the**
2 **Commission should approve for unbundled loops and why?**

3 **A.** I believe the cost results that were produced using a 4 ½ year growth period
4 represent a reasonable average cost of the unbundled loop based on TELRIC
5 methodology and Verizon DC's network. Although this [proprietary information]
6 differs slightly from Verizon DC's price, it represents a more accurate use of
7 forward-looking inputs, and, thus, reflects a more accurate cost of the loop using
8 TELRIC methodology. Moreover, as advanced earlier in my testimony, a lower
9 cost will encourage real competition in the District's telecommunications market.
10 In addition, no matter what the Commission determines as the appropriate cost, the
11 rates for unbundled loops should be divided into three types: data, voice and
12 combined. The data loop price should reflect **50%** of the costs of the loop, the
13 voice loop should reflect **50%** of the costs of the loop and the use of the loop for
14 both data and voice should reflect 100% of the costs. I explain this further in the
15 next section of my testimony (*See*, Section V, Line Sharing, *infra*).

16 **V. Line Sharing (Commission Issue 16)**

17 **Q. What is Commission Issue 16?**

18 **A.** Should the Commission require Verizon DC to provide unbundled copper loops
19 compatible with ISDN and xDSL with conditioning or additional electronics
20 priced separately?

1 **Q. How do you define line sharing?**

2 **A.** Incumbent LECs are obligated **to** provide loops that must be capable of carrying
3 voiceband service as well as xDSL-based service. The provision of both services
4 on the same loop is what is called “line sharing.” By unbundling the high
5 frequency portion of the loop, two different service providers **are** able to offer
6 voice and data services over the same line. Line splitters **are** used to separate the
7 high frequency xDSL signals from low frequency (voiceband) analog signals
8 passing through the loop.

9 **Q. What is Verizon DC proposing with regard to provisioning xDSL compatible**
10 **loops?**

11 **A.** Verizon DC has recognized that the FCC’s UNE Remand Order requires them **to**
12 offer xDSL compatible **Loops**.⁴⁰ Verizon DC has developed recurring and
13 nonrecurring costs for copper-based xDSL loops, as well **as** loops using a mixture
14 of copper, fiber **and/or** DLC systems. Following the FCC orders, if the loop is not
15 able to provide xDSL, Verizon DC will offer **Load Coil/Equipment** Removal and
16 Bridged Tap Removal.

17 **Q. What is the cost of the high frequency portion of the loop?**

18 It has been said that the cost of using the high frequency portion of the loop is slim
19 or none because phone companies have already provided customers **with** a loop

1 for voice services. If a customer would request access to xDSL-based services,
2 the additional cost, if any, will be related to conditioning the loop for high
3 frequency transmission. Once the loop has been conditioned to provide high
4 frequency data services, its use does not require more maintenance; the loop does
5 not wear out any faster because of its sharing. **Thus**, there is not an additional
6 variable cost. **The** recurring cost of the loop is fixed, regardless if it is used for
7 one or both services.

8 One could conclude that the marginal cost of using the high frequency ~~portion~~ of
9 the loop is zero, and only an installation/line conditioning cost should be charged,
10 but this conclusion is wrong.

11 **Q.** Why **do** you say **that** the cost of the high frequency portion of the loop should
12 not be zero?

13 **A.** The **TELRIC** requirement moves the costing of services into the long run. **In** this
14 long run, loops **are** not built solely for basic local exchange service, but for
15 numerous services. Even in today's environment, loops are providing **two**
16 services. Under the above approach, we are considering only the rate component
17 of the marginal cost of providing voice service. The demand for **data** transmission
18 services is increasing and connection times are extending usually beyond normal
19 conversation times. This results in service congestion **and/or** marginal plant

1 expenditures that must be incurred to accommodate incremental demand. **Thus,**
2 marginal usage costs of the data capable portion of the loop tend to be significant.

3 Those who claim that the cost of the loop should be borne by the voice service
4 tend to portray an average loop cost as a resource commitment that occurs because
5 the customer subscribes to phone service (or as a resource that can be saved if he
6 does not – or if he elects to have a dedicated access line for data service). This,
7 however, is not an accurate picture. It is obvious that the marginal cost of the high
8 frequency portion of the loop is small. However, in the long run we will have
9 most customers enjoying both services over a single line causing the cost of the
10 loop to be divided between the voice and the data service.

11 Even if the number of customers with two services over the same loop is not as
12 high as anticipated, charging the cost of the loop to voice-only customers with no
13 additional charges to data-sharing customers violates the principle of Universal
14 Service, particularly as basic voice services become ~~more~~ expensive. If all costs
15 are allocated to voice providers, CLECs and ILECs providing voice services are
16 subsidizing CLECs and ILECs who provide data over the high frequency portion
17 of the loop. **A** scenario such as this will stifle competition for voice service and
18 potentially cause an influx of data providers due to the ability to “free-ride” off
19 another service and company.

1 **Q. Do you have any additional concerns regarding the cost of loops capable for**
2 **line sharing?**

3 **A.** Yes. Phone companies have been designing the size of the distribution cable in
4 residential areas in order to have loop capacity necessary for at least two separate
5 telephone numbers for each residence. Network designs account for requirements
6 that are expected in the future. Now the incumbent **LECs** are designing the
7 network for voice and data transmission over the same loop.

8 Therefore, cost recovery should be from each of the elements that cause that
9 investment. Most of the loops are already deployed, but if **TELRIC** is the
10 forward-looking cost of reproducing the network and there are new standards
11 in loop design for a wide bandwidth, we should consider that the use of the
12 high frequency portion of the loop induces investment in capable loops.

13 It might be the case that the short run marginal cost of the use of the high
14 frequency portion of the loop is near zero, whether on an incremental or
15 avoided cost basis. However, in the long run, costs will be considered for the
16 design of loops capable for bandwidth services and marginal expenditures
17 required to accommodate increasing demand. Thus, the long run marginal cost
18 of the frequency sharing of the loop is positive and accountable.

19 **Q. How does Verizon DC split the cost of the loop between voice and data in the**
20 **development of rates?**

1 A. In the panel testimony (Verizon **DC** Exhibit D), the Company addressed this issue
2 with the question, "~~Does~~ Verizon DC propose to allocate **any** loop costs to the
3 rates it sets forth for line sharing?" Verizon DC responded, "**No**, not at this time."

4 Q. ~~Do~~ you consider ~~this~~ practice just and reasonable?

5 A. No. For the reasons stated above, the cost of the loop has to be recovered from all
6 parties that are using it. Even if the incumbent LEC incurs zero loop costs when it
7 uses the high frequency portion of the loop to provide xDSL service over a voice
8 line, allowing the free use of the loop for line sharing with data services is not
9 reasonable. The forward-looking cost of the high frequency portion in line sharing
10 is not zero and both services should be responsible for its cost recovery.

11 The FCC, in an effort to promote the goals of the Telecommunications Act of
12 **1996**, stated:

13 "Line sharing would enrich consumer choice by enabling customers
14 to keep their analog voice service with the incumbent local exchange
15 company, while choosing a competitive LEC to provide high-speed
16 digital services over the same line without incurring the additional
17 expense of a second line."⁴¹

18 This statement **does** not mean that when two services **are** provided over the same
19 vehicle, one would **be** responsible for all the cost and the other one would be a free
20 rider. Rather, the **FCC** refers to the fact that the telephone subscriber would not

⁴¹

In re Deployment of Wireline Services Offering Advanced Telecommunications Capability, CC Docket No. 96-98, Third Report and Order, ~~implementation of the Local Competition provisions of the Telecommunications Act of 1996~~, FCC 99-355. CC Docket No. 98-147, Fourth Report and Order. CC Docket No. 98 at ¶ 13, 20.

1 have to incur the additional expense of a second line. The assumption that the **cost**
2 of sharing the high frequency portion of the loop is zero because the loop is
3 already deployed for use by voice services is unwarranted, and wrong in a long
4 run cost environment where the design of the loop combines and considers local
5 voice service, toll voice services and data services.

6 **Q. As asked by the Commission in Issue 16.6, how should the cost of the loop be**
7 **assessed in the case of line sharing?**

8 A. All services using the loop should share in the cost of the loop. Both services are
9 causing the design and costs of loops capable of transmitting good quality voice
10 conversations **as well as** transmitting good quality data at fast speeds over the
11 same loop. Consequently, the cost of the loop should be shared by all services.

12 **Q. Could you continue illustrating why both services should share the cost of the**
13 **loop?**

14 A. **Yes.** Let me illustrate my point with an **example.** There is an inhabited island
15 where investor **A** wants to develop a resort, and there are **no** roads that go to the
16 mainland. Investor **A** decides to build a bridge that would allow his resort to be
17 more attractive. Over the years, he plans to take care of its maintenance and
18 operation, **which** is part of the costs of his business. **In** a competitive environment,
19 Investor **B** decides to build another ~~resort~~ on the same island. Investor **B** now
20 faces two financial options: **(1)** he could build **his own** bridge, or **(2)** he could

1 arrange to “share” the bridge with Investor **A**. It will be in the best interest of
2 Investor **A’s** business to also share the cost of maintenance and operation of the
3 bridge. Therefore, Investor **A** and Investor B will both bear the cost of using the
4 bridge.

5 It is in the same manner that the cost of a loop should be shared by both service
6 providers – the voice service provider and the data service provider.

7 **Q.** What is a just and reasonable ~~allocation~~ of cost in line sharing?

8 **A.** Some may argue that there is no economically correct or proscribed way to
9 allocate the loop. However, there are incorrect ways – like assigning zero cost to
10 either service. I believe that it is just and reasonable to equally allocate the cost
11 between data usage and voice usage. Since data traffic and voice traffic share the
12 loop, **50%** of the cost of the loop should be assigned to data and **50%** to voice.

13 **Q.** ~~How~~ should loops that are to **carry only** voice ~~traffic~~ be priced?

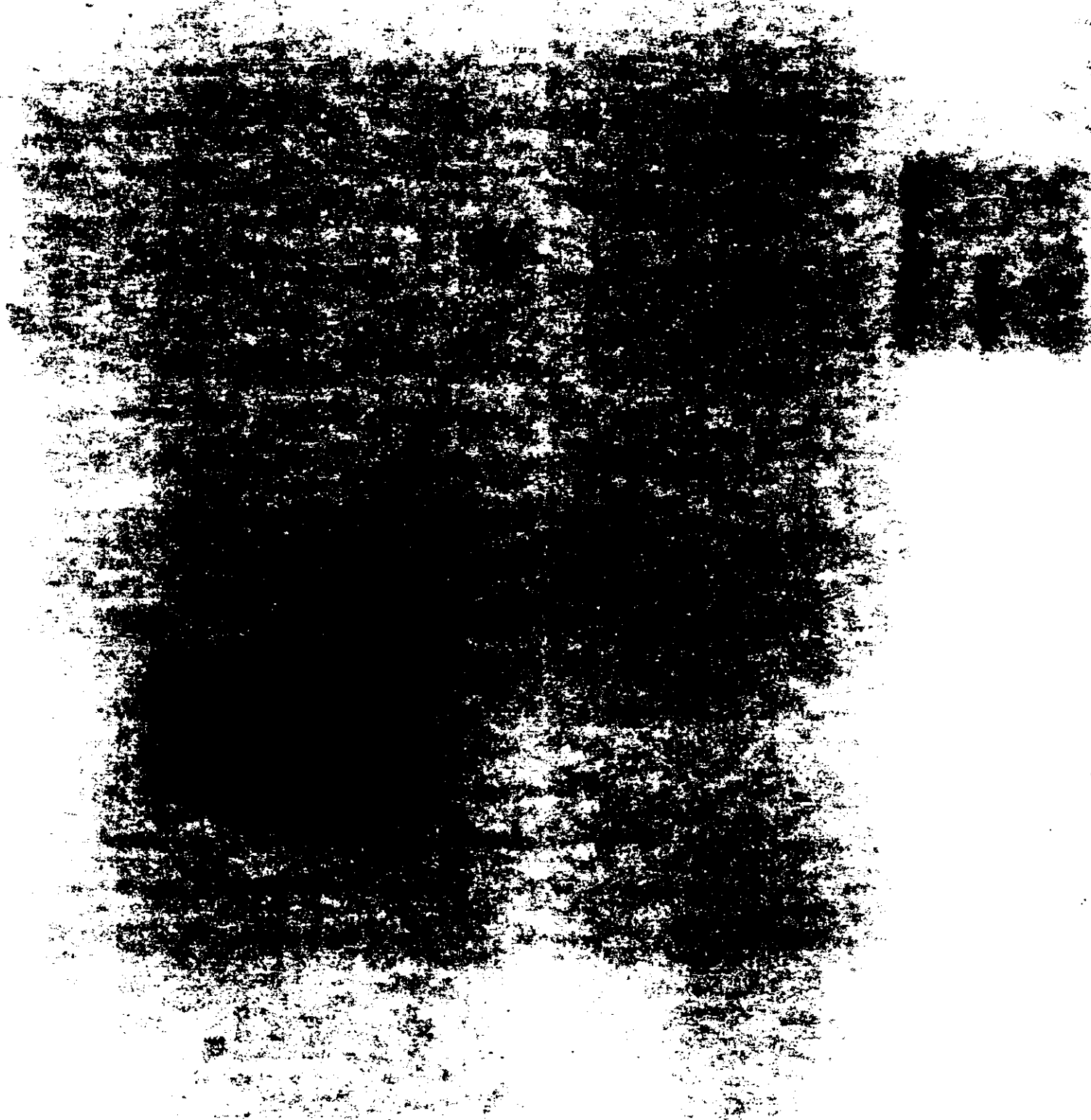
14 **A.** The same principles applied to data should be applied to voice. If a CLEC wants a
15 loop **to** provide only voice service, then **50%** of the loop’s costs should be
16 reflected in a voice grade UNE loop. Likewise, a CLEC that wants to provide
17 only ~~data~~ service should be responsible for only **50%** of the loop costs.
18 Alternatively, if a CLEC wants to provide both data and voice, 100% of the cost
19 should ~~be~~ included in the price.

1 **Q.** **Does** this conclude your testimony?

2 **A.** Yes, it does.

TESTIMONY OF
OPC WITNESS
ALLEN G. BUCKALEW
(NON-PROPRIETARY VERSION)

EXHIBIT OPC (A)-1
THROUGH OPC (A)-6



VERIZON WASHINGTON, DC INC.

FORMAL CASE NO. 962

RESPONSE TO OPC DATA REQUEST NO. 1

September **5,2001**

- 1-14.** Provide the total number of access lines in the District and the total number provided under the wholesale tariff.

RESPONSE: As of July 31, 2001, Verizon DC's access ~~lines~~ in service were:

Retail:	854,655
Resale:	15,376
Verizon Official:	8,615
Total:	878,646